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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/016,475  | 11/30/2001  | Roger Proksch        | 41369/LTR/A656      | 4570             |
| 20985   | 7590        | 03/16/2005           | EXAMINER            |                  |
| FISH & RICHARDSON, PC<br>12390 EL CAMINO REAL<br>SAN DIEGO, CA 92130-2081 |             |                      | PATIDAR, JAY M      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2862                |                  |

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/016,475

Applicant(s)

PROKSCH ET AL.

Examiner

Jay M. Patidar

Art Unit

2862



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 61-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 61-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. This communication is in response to applicants' amendment filed on October 28, 2004.

2. Claims 61-62,65-68 are objected to because of the following informalities:

In claim 61, this claim claims the subject matter which is already in claim 1.

In claims 62,66, there is no antecedent basis for "core forms"; it is unclear as to what is meant by the phrase "forms collectively means for reducing Barkhausen noise"; it is vague as to how such noise is reduced.

In claim 65, it is unclear as to "a signal" at line 2 is the same signal claimed in claim 64.

In claim 67, there is no antecedent basis for "core forms".

In claim 68, it is unclear as to "a signal" at line 2 is the same signal claimed in claim 67.

Appropriate correction is required.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 2, two coils for inside coil form must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,61-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neff (2,452,862) in view of applicants admitted prior art (AAPA) & common knowledge in the art.

As to claims 1,61-68, Neff discloses a displacement apparatus including a first and second non-magnetic coil forms (2,6) with a common axis, each wound with at least one winding (3,4,5); the outside diameter of the first form with its winding or windings being smaller than the inside diameter of the second form (Note Fig. 2) so that each may be displaced relative to the other with the first form inside the second form; the winding on the movable form magnetically coupled to the winding on the stationary form and a circuit generating a signal responsive to relative displacement between the coil forms. Neff does not explicitly disclose a means for reducing noise. Applicants admitted prior art teaches to remove Barkhausen noise from the output signal by various means (Note pages 5-6). Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of

Neff to have included a means to reduce the noise from the output signal as taught by applicants admitted prior art to enhance the sensitivity of the device.

Neff does not explicitly disclose that the forms are non-ferromagnetic. It is common in the magnetic field art to have a coil form made from non-ferromagnetic material. One ordinary skill in the art would have found it obvious to use non-ferromagnetic coil forms since they are very well known in the art for their use.

As to claim 2, Neff discloses two coils on inside coil form and one coil for outside coil form (Fig. 4).

As to claim 3, Neff discloses two coils on outside coil form and one for inside coil form (Fig. 1).


As to claim 69, the method claim 69 recited for using the apparatus in claims 64-66 are an inherent use of the apparatus of Neff & AAPA and are rejected on the same grounds. One of ordinary skill would find it inherent that the apparatus of Neff modified with AAPA and common knowledge in the art operates in the functional manner claimed by applicant.

5. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 703-308-6723. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0956.

  
Jay M. Patidar  
Primary Examiner  
Tech Center 2862  
March 10, 2005